Application for Approval to Establish the Otter Unit

In accordance with the provisions of 11 AAC 83.321 five copies of the non-confidential portions of this Application for Approval to Establish the Otter Unit ("Application") and two copies of the confidential portions of the Application ("GG&E Report"), submitted under separate cover with this Application, are submitted as part of this Application. Cook Inlet Energy, LLC ("CIE") hereby requests that the copies of the GG&E Report be held confidential under AS 38.05.035(a)(8).

Application Contents

- 1. Background and description of the area proposed to be unitized.
- 2. Approval criteria the Commissioner of Natural Resources must consider under 11 AAC 83.303 to approve the unit agreement for the proposed Otter Unit.
- 3. Proposed modifications to the state's Model Unit Agreement form and rationale for the modifications.
- 4. Request for a Written Finding and Approval of the proposed Otter Unit Agreement and Initial Plan of Exploration.

Attachments required by 11 AAC 83.306

- 1. Otter Unit Agreement, executed by CIE, the sole working interest owner ("WIO") having full controlling interest in the subject leases that comprise the proposed Otter Unit. No evidence to obtain joinder of any other proper party is required, as CIE is the 100% WIO of the subject leases and is the only proper party other than the State of Alaska to this proposed unit.
- 2. Exhibits A, B, and G (Initial Plan of Exploration) to the Otter Unit Agreement, as required by 11 AAC 83.341.
- 3. Otter Unit Operating Agreement executed by CIE as the sole WIO. The Otter Unit Operating Agreement is submitted for information purposes only and does not require the Commissioner's approval for adoption or amendment.
- 4. Pertinent geological, geophysical, engineering, well data, and interpretation of said data needed to support the Application (or citations for previously submitted data).
- 5. Copy of the State of Alaska's State Only Model Unit Agreement Form, Revised March 2011, with proposed modifications for the Otter Unit Agreement.
- 6. CIE check # in the amount of \$5,000 as the Application Fee for a new unit formation.



Executive Summary and Request for Written Finding Approving the Otter Unit Agreement and the Initial Plan of Exploration

Having demonstrated that the Otter structure is present and that sand reservoirs capable of sustaining production are probable, Cook Inlet Energy requests the Department of Natural Resources' approval of this Otter Unit Application. CIE has extensive 2D seismic covering the Otter structure and has drilled the Otter #1 well penetrating the Otter structure. CIE intends to reenter the Otter #1 Well or drill another exploratory well that will evaluate the entire Beluga formation within the Otter structure, then drill a delineation well in a northeasterly updip direction from the exploratory well. The planned exploratory and delineation wells would be permitted and drilled to a depth sufficient to test already penetrated sands, and additionally to drill through deeper Beluga and Upper Tyonek sands not previously encountered on the structure. The wells would be drilled in such a manner as to preclude production problems similar to those encountered in the Otter #1 well minimizing effects on clays within the prospective reservoir rock.

Background and Description of the Proposed Unit Area

The proposed Otter Unit Area is located onshore on the West side of Cook Inlet. It is situated approximately 9 miles north of Beluga River field and 5 miles west southwest from the Lewis River gas field. Nearest production was established in the Pretty Creek Field area located approximately 3.5 miles south southeast of the Otter structure.

Portions of four State of Alaska oil and gas leases are proposed to be included in the Otter Unit. These leases are ADL 390579, ADL 390749, ADL 391621, and ADL 391624. These leases comprise an area of 13,324 acres, with a total of 5,855 acres proposed for the unit. All of these leases are contiguous and are located beneath lands owned by the State of Alaska and the Matanuska-Susitna Borough. A large portion of the surface is managed by the Alaska Department of Fish and Game as part of the Susitna Flats State Game Refuge. The Game Refuge covers the surface of ADL 390749 and ADL 391621, and the southeast portions of ADL 390579 and ADL 391624. The Matanuska-Susitna Borough owns a portion of the surface of ADL 390579.

Access to the area is by the local Tyonek/Beluga road system. The road system is remote and not connected to the main highway system. Equipment can be transported by air to the Beluga airstrip, or by barge to the Tyonek or Beluga barge landings. Access to the Otter leases is by an established road on a state right-of-way, ADL 33939. CIE has upgraded and maintained this road as part of exploration activities on the Otter #1 well.

ADL 390579 and ADL 390749 were acquired from our predecessor in interest, Pacific Energy Resources. They were originally issued in Cook Inlet competitive oil and gas lease sales in 2004 and 2005, respectively. ADL 391621 and ADL 391624 were acquired in the 2010 oil and gas lease sale by CIE.

The 5,760 acre ADL 390579's primary term expired May 31, 2012; it is currently held past its primary term while drilling operations are ongoing at the Otter #1 well. The 2,522 acre ADL 390749 will expire on September 30, 2013. ADL 391621 (2,528 acres) and ADL 391624 (2,514 acres) will expire on February 28, 2018.

Geologically, the proposed unit is an oval shaped anticlinal structure situated in the downthrown footwall block of a northeast striking high angle thrust fault. This south thrusting fault is in the forefront of the regional Bruin Bay fault system that splays off the southwest-northeast trending Castle Mountain fault system. Reservoirs within the structure are comprised of sands deposited by a number of southerly trending anastomosing stream channels.

Approval Criteria the Commissioner of Natural Resources Must Consider Under 11 AAC 83.303 to Approve the Proposed Otter Unit

1. Promote conservation of all natural resources, including all or part of an oil or gas pool, field, or like area

1.1. Environmental costs and benefits of unitized exploration or development

A portion of the proposed unit lies within the Susitna Flats State Game Refuge ("SFSGR"), which places certain limitations on activities. Oil and gas development is allowed within the SFSGR, under terms and conditions consistent with the Susitna Flats State Game Refuge Management Plan, 5 AAC 95, and the Cook Inlet Areawide Oil and Gas Lease Sale Mitigation Measures and Lessee Advisories. DNR has carefully considered these measures to ensure that impacts from activity within the unit area will be minimized. CIE will comply with these mitigation measures and other stipulations.

The footprint of the proposed exploration and development will be minimized by unitizing the leases. CIE anticipates building up to two 300' x 350' gravel drill pads during the initial plan period, in addition to the gravel drill pad already constructed for drilling the Otter # 1 well. The gravel pads will be constructed over geotextile material to minimize impact to the surface. In order to develop the prospect on a lease-by-lease basis, at least 4 pads would be needed.

1.2. Prior exploration activities in the proposed unit area

To date two wells have been drilled within three miles of the proposed unit. Texas International Petroleum's Pretty Creek State No. 1 well was drilled to a depth of 6,450' immediately north of the above fault into the upthrown hanging wall. This well did not penetrate the Otter structure but did penetrate sands comparable to those underlying the proposed unit area. This well was deemed to be non-productive and subsequently plugged and abandoned.

Cook Inlet Energy's Otter No. 1 well was spud May 19, 2012 and drilled into the Otter structure into the downthrown fault block. The well drilled to a depth of 5,686' MD before mechanical conditions precluded drilling deeper into the Beluga reservoirs. Reservoir quality sands with strong hydrocarbon shows were encountered by the well and are currently under evaluation. Due to the premature termination of drilling operations, a total of approximately 900' of Beluga formation potential and additional Tyonek formation section remains as unevaluated potential for hydrocarbon reservoirs. Additionally, deeper oil potential for the Lower Tyonek, Hemlock and deeper intervals may exist.

Cook Inlet Energy owns and/or has licensed a total of approximately 45 miles of 2-D seismic comprised of seven dip and strike lines used in defining the Otter structure. These data are of varying quality but in their entirety demonstrate a reasonable interpretation of the structure.

2. Promote the prevention of economic or physical waste

2.1. Geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir proposed for unitization

Natural gas reservoirs in the Beluga are very susceptible to formation damage and are extremely sensitive to both drilling and completion practices and fluids. Cook Inlet Energy is going to extraordinary efforts both in fracking and testing the Otter reservoirs.

2.2. Plans for exploration or development of the unit area

Under the initial Plan of Exploration, prior to March 31, 2015, CIE commits to drilling and completing a well to a depth capable of testing the entire Beluga formation in either Tract 1 (ADL 390579) or Tract 2 (ADL 390749). CIE also commits to drilling a second well in either Tract 1 or Tract 2 by March 31, 2016. If successful, CIE will apply for an initial Participating Area ("PA") or Tract operation by May 31, 2016. CIE is evaluating two options to reenter the Otter #1 Well by March 31, 2014 and deepen the well to evaluate the complete Beluga formation. However, CIE cannot commit to either of these operations at this time due to mechanical and logistical considerations further discussed in the Plan of Exploration.

If CIE fails to meet the first drilling commitment (March 31, 2015), the proposed unit will terminate and all expired leases within the unit not otherwise held will automatically return to the state. If CIE completes the first drilling commitment but fails to complete the second drilling commitment (March 31, 2016), the unit will terminate and all expired leases not otherwise held will be returned to the state. If both drilling commitments are successful but CIE fails to apply for an Initial PA or Tract operation by the deadline, CIE will voluntarily terminate the unit and return all expired leases not otherwise held to the state. The initial Plan of Exploration for the proposed Otter Unit is attached to this Application as Exhibit G.

CIE is the sole Working Interest Owner in the leases proposed for inclusion in the Otter Unit. However, the leases have differing expiration dates. CIE wishes to unitize this acreage to allow it to rationally explore and develop the Otter Structure based upon sound geological, reservoir engineering, and commercial considerations, rather than drilling wells in locations and sequences intended to hold acreage nearing expiration.

3. Provide for the protection of all parties of interest, including the state

3.1. Economic cost and benefits to the state

Unitization of the Otter prospect carries certain economic costs to the state, such as lost revenue from bonus bids and additional rentals received by putting these leases back into the Areawide Lease Sale. However, any loss of revenue caused by losing the opportunity to put these leases back out for sale is more than made up by the more rapid development of the resource. CIE is positioned to explore and develop this unit faster than anyone else, with up-to-date data, a drill rig in the area, and 100% working interest in the proposed unit. This area is in close proximity to the Beluga pipeline, with only a short 4.5 mile pipeline needed to connect Otter with the Cook Inlet gas distribution system. CIE anticipates being able to put much-needed gas into the Cook Inlet energy system within a short period of time after initial development of this prospect. If these leases were allowed to expire, it would be a minimum of three years before another operator would have the ability to acquire the acreage, then permit and explore this area.

3.2. Protection of other parties of interest

The only proper parties as identified in 11 AAC 83.328 under the proposed Otter Unit Agreement would be the State of Alaska and Cook Inlet Energy, LLC. The State of Alaska is the sole mineral owner and CIE holds 100% of the Working Interest. CIE believes that it is in both parties' interest to approve the Otter Unit Agreement as proposed to facilitate the expedited delineation and development of the potential hydrocarbon resources within the Otter structure. CIE has spent over \$9 million to date on the exploration of this prospect in 2012, has contracts in place with local contractors for continued operations, has an agreement in place to maintain the Pretty Creek road in order to support our operations, has an approved Plan of Operations in place for its Otter #1 well with ongoing operations, and has a right of way application pending before the Division of Mining, Land and Water for a gas pipeline from the Otter Unit to the nearest pipeline.

4. Other relevant factors the Commissioner determines necessary or advisable to protect the public interest

The Department is very aware of the need of various public utilities to supplement their existing natural gas supplies in the Cook Inlet Basin. CIE firmly believes that it has the best opportunity to quickly complete the exploration of this acreage, then rapidly bring it into production should commercial quantities of gas be discovered.